

# IsoSciences has demonstrated their expertise in synthesizing Vitamin D metabolites for over 15 years.



IsoSciences' Vitamin D compounds have been used for over a decade by diagnostic labs and universities around the world. Due to the complexity and sensitivity of Vitamin D, these compounds are stringently monitored for purity and stability to ensure that our customers receive high quality material.

Vitamin D and related metabolites are of key interest for a variety of diseases ranging from bone health, intestinal absorption, immune diseases and cancer. Vitamin D can be obtained either through dermal synthesis from sunlight or diet. In the liver it is hydroxylated at the 25 position. Then hydroxylation in the kidney at the 1 position produces 1,25-Dihydroxyvitamin D, the most biologically active form.

## 25-Hydroxyvitamin D Metabolites

Catalog #	Vitamin	Compound	Price	CertiMass™ Price (Vitamin in Solution)	
4176UNL	25-Hydroxyvitamin D2	25-Hydroxyergocalciferol	\$420/mg	\$168/1mL at 50µg/mL	\$228/1mL at 100µg/mL
4176	25-Hydroxyvitamin D2-[2H3]	25-Hydroxyergocalciferol-[2H3]	\$2,512/mg	\$459/1mL at 50µg/mL	\$647/1mL at 100µg/mL
10038	25-Hydroxyvitamin D2-[13C <sub>3</sub> ]	25-Hydroxyergocalciferol-[13C <sub>3</sub> ]	Inquire	Inquire	Inquire
4163UNL	25-Hydroxyvitamin D3	Calcifediol	\$215/5mg	\$135/1mL at 50µg/mL	\$185/1mL at 100µg/mL
4163	25-Hydroxyvitamin D3-[2H3]	Calcifediol-[2H3]	\$805/mg	\$200/1mL at 50µg/mL	\$256/1mL at 100µg/mL
13085	25-Hydroxyvitamin D3-[2H <sub>6</sub> ]	Calcifediol-[2H <sub>6</sub> ]	\$272/mg	\$109/1mL at 50µg/mL	\$135/1mL at 100µg/mL
13125	25-Hydroxyvitamin D3-[ <sup>13</sup> C <sub>5</sub> ]	Calcifediol-[13C <sub>5</sub> ]	\$407/mg	\$245/1mL at 100µg/mL	

## 3-EPI-25-Hydroxyvitamin D Metabolites

Catalog #	Vitamin	Compound	Price	CertiMass™ Price (Vitamin in Solution)	
11133	3-Epi-25-Hydroxyvitamin D2	3-Epi-25-Hydroxyergocalciferol	\$2,084/mg	\$375/1mL at 50µg/mL	\$448/1mL at 100µg/mL
14045	3-Epi-25-Hydroxyvitamin D2-[2H3]	3-Epi-25-Hydroxyergocalciferol-[2H3]	Inquire	Inquire	Inquire
7004	3-Epi-25-Hydroxyvitamin D3	3-Epi-Calcifediol	\$881/mg	\$321/1mL at 50µg/mL	\$407/1mL at 100μg/mL
11102	3-Epi-25-Hydroxyvitamin D3-[ <sup>2</sup> H <sub>3</sub> ]	3-Epi-Calcifediol-[2H3]	\$1,439/mg	\$491/1mL at 50µg/mL	\$628/1mL at 100µg/mL
14041	3-Epi-25-Hydroxyvitamin D3-[13C <sub>5</sub> ]	3-Epi-Calcifediol-[13C <sub>5</sub> ]	Inquire	Inquire	Inquire







Contact Us Today to learn more about our product offerings!









IsoSciences continues to provide the most diverse selection of Vitamin D internal standards available.



#### Vitamin D

Catalog #	Vitamin	Compound	Price	CertiMass™ Price (Vitamin in Solution)	
5014UNL	D2	Ergocalciferol	\$37/mg	\$135/1mL at 100µg/mL	\$185/1mL at 1mg/mL
5014	D2-[2H <sub>3</sub> ]	Ergocalciferol-[2H3]	\$719/mg	\$390/1mL at 100µg/mL	\$791/1mL at 1mg/mL
3077UNL	D3	Cholecalciferol	\$37/mg	\$135/1mL at 100µg/mL	\$185/1mL at 1mg/mL
\$3077	D3-[2H <sub>3</sub> ]	Cholecalciferol-[2H3]	Inquire	\$287/1mL at 100µg/mL	\$527/1mL at 1mg/mL
S15008	D3-[2H <sub>6</sub> ]	Cholecalciferol-[2H <sub>6</sub> ]	Inquire	\$272/1mL at 100µg/mL	\$597/1mL at 1mg/mL
S12334	D3-[13C <sub>3</sub> ]	Cholecalciferol-[13C3]	Inquire	\$316/1mL at 100µg/mL	
S13036	D3-[ <sup>13</sup> C <sub>5</sub> ]	Cholecalciferol-[ <sup>13</sup> C <sub>5</sub> ]	Inquire	\$381/1mL at 100µg/mL	\$1,418/1mL at 1mg/mL

## **Dihydroxyvitamin D Metabolites**

Catalog #	Vitamin	Compound	Price	CertiMass™ Price (Vitamin in Solution)	
10002UNL	1,25-Dihydroxyvitamin D2	1,25-Dihydroxyergocalciferol	\$489/mg	\$272/1mL at 50µg/mL	\$380/1mL at 100µg/mL
18114	1,25-Dihdyroxyvitamin D2-[13C <sub>3</sub> ]	1,25-Dihydroxyergocalciferol-[13C3]	Inquire	\$525/1mL at 5µg/mL	
5154UNL	1,25-Dihydroxyvitamin D3	Calcitriol	\$544/mg	\$272/1mL at 50µg/mL	\$380/1mL at 100µg/mL
5154	1,25-Dihydroxyvitamin D3-[²H <sub>3</sub> ]	Calcitriol-[2H <sub>3</sub> ]	\$2,276/mg	\$433/1mL at 50µg/mL	\$626/1mL at 100µg/mL
18115	1,25-Dihdyroxyvitamin D3-[13C <sub>3</sub> ]	Calcitriol-[ <sup>13</sup> C <sub>3</sub> ]	Inquire	\$263/1mL at 5µg/mL	
15409	1,25-Dihydroxyvitamin D3-[²H <sub>e</sub> ]	Calcitriol-[2H <sub>6</sub> ]	\$2,625/mg	\$1,032/1mL at 100µg/mL	
11171	24,25-Dihydroxyvitamin D2	24,25-Dihydroxyergocalciferol	\$544/mg	\$515/1mL at 100µg/mL	
13043UNL	24R,25-Dihydroxyvitamin D3	Secalciferol	\$707mg	\$673/1mL at 100µg/mL	
13043	24R,25-Dihydroxyvitamin D3-[2H <sub>6</sub> ]	Secalciferol-[2H <sub>e</sub> ]	\$1,038/mg	\$869/1mL at 100µg/mL	
13127	EPI-24R,25-Dihydroxyvitamin D3	3-Epi-Secalciferol	Inquire	Inquire	

## **Competitive Advantages**

#### 1. INCREASED TESTING ACCURACY:

When shifting to <sup>13</sup>C and <sup>15</sup>N isotopes, customers are assured a superior internal standard that co-elutes with the analyte. The isotopes are placed in non-exchangeable positions and in desired molecular fragments to ensure the internal standard allows for accurate measurements.

#### 2. CORRECTS FOR SAMPLE VARIATION:

Why co-elute? An internal standard is used to correct for injection to injection variation. The internal standard is unable to correct for ion suppression and matrix effects without co-elution.

### 3. COMPLETE CERTIFICATE OF ANALYSIS:

A complete Certificate of Analysis is issued with every compound. This includes structural identity by <sup>1</sup>H-NMR and <sup>13</sup>C-NMR, purity assessment by HPLC-UV, GC-FID or HPLC-ELSD and isotope incorporation by LC-MS or GC-MS.

#### 4. HIGH PURITY:

IsoSciences compounds routinely analyze over 98% pure and 98% isotope incorporation with no unlabeled material detected.







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